



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 536-2015

**2015 GRANULAR ROADWAY RENEWAL PROGRAM - PIPELINE ROAD FROM
MOLLARD AVENUE TO PERIMETER HIGHWAY**

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 2015 GRANULAR ROADWAY RENEWAL PROGRAM - PIPELINE ROAD FROM MOLLARD AVENUE TO PERIMETER HIGHWAY

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, June 26, 2015.

B2.2 Bids determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.

B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. SITE INVESTIGATION

B3.1 Further to C3.1, the Bidder may view the Site without making an appointment.

B4. ENQUIRIES

B4.1 All enquiries shall be directed to the Contract Administrator identified in D3.1.

B4.2 If the Bidder finds errors, discrepancies or omissions in the Bid Opportunity, or is unsure of the meaning or intent of any provision therein, the Bidder shall notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.

B4.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator to all Bidders by issuing an addendum.

B4.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.

B4.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Contract Administrator in writing.

B5. CONFIDENTIALITY

B5.1 Information provided to a Bidder by the City or acquired by a Bidder by way of further enquiries or through investigation is confidential. Such information shall not be used or disclosed in any way without the prior written authorization of the Contract Administrator. The use and disclosure of the confidential information shall not apply to information which:

- (a) was known to the Bidder before receipt hereof; or
- (b) becomes publicly known other than through the Bidder; or
- (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.

B5.2 The Bidder shall not make any statement of fact or opinion regarding any aspect of the Bid Opportunity to the media or any member of the public without the prior written authorization of the Contract Administrator.

B6. ADDENDA

- B6.1 The Contract Administrator may, at any time prior to the Submission deadline, issue addenda correcting errors, discrepancies or omissions in the Bid Opportunity, or clarifying the meaning or intent of any provision therein.
- B6.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B6.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/bidopp.asp>
- B6.2.2 The Bidder is responsible for ensuring that he/she has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B6.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 10 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

B7. SUBSTITUTES

- B7.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.
- B7.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B7.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.
- B7.4 The Bidder shall ensure that any and all requests for approval of a substitute:
- (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the Plant, Material or method as either an approved equal or alternative;
 - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
 - (c) identify any anticipated cost or time savings that may be associated with the substitute;
 - (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance;
 - (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance.
- B7.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his/her sole discretion grant approval for the use of a substitute as an "approved equal" or as an "approved alternative", or may refuse to grant approval of the substitute.
- B7.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, to the Bidder who requested approval of the substitute.

- B7.6.1 The Contract Administrator will issue an Addendum, disclosing the approved materials, equipment, methods and products to all potential Bidders. The Bidder requesting and obtaining the approval of a substitute shall be responsible for disseminating information regarding the approval to any person or persons he/she wishes to inform.
- B7.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.
- B7.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative may base his/her Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B17.
- B7.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.
- B7.10 Notwithstanding B7.2 to B7.9, in accordance with B8.6, deviations inconsistent with the Bid Opportunity document shall be evaluated in accordance with B17.1(a).

B8. BID COMPONENTS

- B8.1 The Bid shall consist of the following components:
- (a) Form A: Bid;
 - (b) Form B: Prices, hard copy;
 - (c) Bid Security
 - (i) Form G1: Bid Bond and Agreement to Bond, or Form G2: Irrevocable Standby Letter of Credit and Undertaking, or a certified cheque or draft;
- B8.2 Further to B8.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B7.
- B8.3 All components of the Bid shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Bid.
- B8.4 The Bid shall be submitted enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address.
- B8.4.1 Samples or other components of the Bid which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid.
- B8.4.2 A hard copy of Form B: Prices must be submitted with the Bid. If there is any discrepancy between the Adobe PDF version of Form B: Prices and the Microsoft Excel version of Form B: Prices, the PDF version shall take precedence.
- B8.5 Bidders are advised not to include any information/literature except as requested in accordance with B8.1.
- B8.6 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, will be evaluated in accordance with B17.1(a).
- B8.7 Bids submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.

B8.8 Bids shall be submitted to:

The City of Winnipeg
Corporate Finance Department
Materials Management Division
185 King Street, Main Floor
Winnipeg MB R3B 1J1

B9. BID

B9.1 The Bidder shall complete Form A: Bid, making all required entries.

B9.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:

- (a) if the Bidder is a sole proprietor carrying on business in his/her own name, his/her name shall be inserted;
- (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
- (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
- (d) if the Bidder is carrying on business under a name other than his/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.

B9.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B9.2.

B9.3 In Paragraph 3 of Form A: Bid, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.

B9.4 Paragraph 12 of Form A: Bid shall be signed in accordance with the following requirements:

- (a) if the Bidder is a sole proprietor carrying on business in his/her own name, it shall be signed by the Bidder;
- (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
- (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers and the corporate seal, if the corporation has one, shall be affixed;
- (d) if the Bidder is carrying on business under a name other than his/her own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.

B9.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.

B9.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid and the Contract, when awarded, shall be both joint and several.

B10. PRICES

B10.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.

B10.1.1 For the convenience of Bidders, and pursuant to B8.4.2 and B17.4.2, an electronic spreadsheet Form B: Prices in Microsoft Excel (.xls) format is available along with the Adobe PDF documents for this Bid Opportunity on the Bid Opportunities page at the Materials Management Division website at <http://www.winnipeg.ca/matmgt/>

B10.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.

- B10.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.
- B10.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).
- B10.5 Form B: Prices is organized into Parts: Part 1 of the Work and Part 2 of the Work. Bidders shall provide a total price for each Part and, on the summary sheet, a Total Bid Price consisting of the sum of prices for Part 1 and Part 2.

B11. DISCLOSURE

- B11.1 Various Persons provided information or services with respect to this Work. In the City's opinion, this relationship or association does not create a conflict of interest because of this full disclosure. Where applicable, additional material available as a result of contact with these Persons is listed below.
- B11.2 The Persons are:
- (a) N/A

B12. QUALIFICATION

- B12.1 The Bidder shall:
- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba; and
- (b) be financially capable of carrying out the terms of the Contract; and
- (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.
- B12.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
- (a) be responsible and not be suspended, debarred or in default of any obligations to the City. A list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/debar.stm>
- B12.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
- (a) have successfully carried out work similar in nature, scope and value to the Work; and
- (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
- have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba);
- B12.4 Further to 0, the Bidder shall, within five (5) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder/Subcontractor has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:
- (a) a copy of their valid Manitoba COR certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Certificate of Recognition (COR) Program administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; or

- (b) a copy of their valid Manitoba SECOR™ certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Small Employer Certificate of Recognition Program (SECOR™) administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; or
- (c) a report or letter to that effect from an independent reviewer acceptable to the City. (A list of acceptable reviewers and the review template are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>).

B12.5 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.

B12.6 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B13. BID SECURITY

B13.1 The Bidder shall provide bid security in the form of:

- (a) a bid bond, in the amount of at least ten percent (10%) of the Total Bid Price, and agreement to bond of a company registered to conduct the business of a surety in Manitoba, in the form included in the Bid Submission (Form G1: Bid Bond and Agreement to Bond); or
- (b) an irrevocable standby letter of credit, in the amount of at least ten percent (10%) of the Total Bid Price, and undertaking issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form included in the Bid Submission (Form G2: Irrevocable Standby Letter of Credit and Undertaking); or
- (c) a certified cheque or draft payable to "The City of Winnipeg", in the amount of at least fifty percent (50%) of the Total Bid Price, drawn on a bank or other financial institution registered to conduct business in Manitoba.

B13.1.1 If the Bidder submits alternative bids, the bid security shall be in the amount of the specified percentage of the highest Total Bid Price submitted.

B13.1.2 All signatures on bid securities shall be original.

B13.1.3 The Bidder shall sign the Bid Bond.

B13.1.4 The Surety shall sign and affix its corporate seal on the Bid Bond and the Agreement to Bond.

B13.2 The bid security of the successful Bidder and the next two lowest evaluated responsive and responsible Bidders will be released by the City when a Contract for the Work has been duly executed by the successful Bidder and the performance security furnished as provided herein. The bid securities of all other Bidders will be released when a Contract is awarded.

B13.2.1 Where the bid security provided by the successful Bidder is in the form of a certified cheque or draft pursuant to B13.1(c), it will be deposited and retained by the City as the performance security and no further submission is required.

B13.2.2 The City will not pay any interest on certified cheques or drafts furnished as bid security or subsequently retained as performance security.

B13.3 The bid securities of all Bidders will be released by the City as soon as practicable following notification by the Contract Administrator to the Bidders that no award of Contract will be made pursuant to the Bid Opportunity.

B14. OPENING OF BIDS AND RELEASE OF INFORMATION

- B14.1 Bids will be opened publicly, after the Submission Deadline has elapsed, in the office of the Corporate Finance Department, Materials Management Division, or in such other office as may be designated by the Manager of Materials.
- B14.1.1 Bidders or their representatives may attend.
- B14.1.2 Bids determined by the Manager of Materials, or his/her designate, to not include the bid security specified in B13 will not be read out.
- B14.2 Following the submission deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>
- B14.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>
- B14.4 The Bidder is advised that any information contained in any Bid may be released if required by City policy or procedures, by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law.

B15. IRREVOCABLE BID

- B15.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid.
- B15.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work until a Contract for the Work has been duly executed and the performance security furnished as herein provided, but any Bid shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 11 of Form A: Bid.

B16. WITHDRAWAL OF BIDS

- B16.1 A Bidder may withdraw his/her Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B16.1.1 Notwithstanding C23.3, the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.
- B16.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Bid or the Bidder's authorized representatives named in Paragraph 12 of Form A: Bid, and only such person, has authority to give notice of withdrawal.
- B16.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:
- (a) retain the Bid until after the Submission Deadline has elapsed;
 - (b) open the Bid to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 12 of Form A: Bid; and
 - (c) if the notice has been given by any one of the persons specified in B16.1.3(b), declare the Bid withdrawn.
- B16.2 A Bidder who withdraws his/her Bid after the Submission Deadline but before his/her Bid has been released or has lapsed as provided for in B15.2 shall be liable for such damages as are imposed upon the Bidder by law and subject to such sanctions as the Chief Administrative

Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law, including the right to retain the Bidder's bid security.

B17. EVALUATION OF BIDS

B17.1 Award of the Contract shall be based on the following bid evaluation criteria:

- (a) compliance by the Bidder with the requirements of the Bid Opportunity, or acceptable deviation therefrom (pass/fail);
- (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B12 (pass/fail);
- (c) Total Bid Price;
- (d) economic analysis of any approved alternative pursuant to B7.

B17.2 Further to B17.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements or minor informalities or irregularities, if the interests of the City so require.

B17.3 Further to B17.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his/her Bid or in other information required to be submitted, that he/she is responsible and qualified.

B17.4 Further to B17.1(c), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.

B17.4.1 Further to B17.1(a), in the event that a unit price is not provided on Form B: Prices, the City will determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.

B17.4.2 The electronic Form B: Prices and the formulas imbedded in that spreadsheet are only provided for the convenience of Bidders. The City makes no representations or warranties as to the correctness of the imbedded formulas. It is the Bidder's responsibility to ensure the extensions of the unit prices and the sum of Total Bid Price performed as a function of the formulas within the electronic Form B: Prices are correct.

B18. AWARD OF CONTRACT

B18.1 The City will give notice of the award of the Contract or will give notice that no award will be made.

B18.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be responsible and qualified, and the Bids are determined to be responsive.

B18.2.1 Without limiting the generality of B18.2, the City will have no obligation to award a Contract where:

- (a) the prices exceed the available City funds for the Work;
- (b) the prices are materially in excess of the prices received for similar work in the past;
- (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
- (d) only one Bid is received; or
- (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.

B18.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid, in accordance with B17.

- B18.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his/her Bid upon written request to the Contract Administrator.
- B18.4 As noted in D2 and identified in Form B: Prices, the Work of Part 2 will be contingent upon the Province approving funding for the Work. If sufficient funding for Part 2 Work is not approved by the Province the City shall have the right to eliminate all or any portion of Part 2 Work in accordance with D2.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for Construction* (Revision 2006 12 15) are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for Construction* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/gen_cond.stm
- C0.2 A reference in the Bid Opportunity to a section, clause or subclause with the prefix “**C**” designates a section, clause or subclause in the *General Conditions for Construction*.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

D1.1 In addition to the General Conditions for Construction, these Supplemental Conditions are applicable to the Work of the Contract.

D2. SCOPE OF WORK

D2.1 The Work to be done under the Contract shall consist of:

- (a) Granular Road Renewal
 - (i) Pipeline Road – Mollard Avenue to Perimeter Highway

D2.2 The major components of Work are as follows:

- (a) Granular Road Renewal
 - (i) Excavation of existing gravel roadway
 - (ii) Compaction of sub-grade
 - (iii) Placement of non-woven separation geotextile fabric
 - (iv) Supply and placement of geogrid, as required
 - (v) Placement and compaction of sub-base and base course
 - (vi) Ditch excavation
 - (vii) Placement of clay borrow site material
 - (viii) Removal of existing culverts and installation of new culverts
 - (ix) Supply and installation of debris grates
 - (x) Supply and installation of flap gate
 - (xi) Restoration of private approaches
 - (xii) Ditch restoration
 - (xiii) Placement of chip seal surface treatment

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is KGS Group, represented by:

Roy Houston
Manager of Civil/Municipal Services
Telephone No. (204) 896-1209
Facsimile No. (204) 986-0754

D3.2 At the pre-construction meeting, Roy Houston will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D3.3 Bids Submissions must be submitted to the address in B8.8

D4. CONTRACTOR'S SUPERVISOR

- D4.1 At the pre-construction meeting, the Contractor shall identify his/her designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.
- D4.2 At least two (2) business days prior to the commencement of any Work on the site, the Contractor shall provide the Contract Administrator with a phone number where the supervisor identified in D4.1 or an alternate can be contacted twenty-four (24) hours a day to respond to an emergency.

D5. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE

- D5.1 The Contract, all deliverables produced or developed, and information provided to or acquired by the Contractor are the property of the City and shall not be appropriated for the Contractors own use, or for the use of any third party.
- D5.2 The Contractor shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Contract Administrator.
- D5.3 The following shall be confidential and shall not be disclosed by the Contractor to the media or any member of the public without the prior written authorization of the Contract Administrator;
- (a) information provided to the Contractor by the City or acquired by the Contractor during the course of the Work;
 - (b) the Contract, all deliverables produced or developed; and
 - (c) any statement of fact or opinion regarding any aspect of the Contract.
- D5.4 A Contractor who violates any provision of D5 may be determined to be in breach of Contract.

D6. NOTICES

- D6.1 Except as provided for in C23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.
- D6.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D6.3 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the facsimile number identified in D3.1.
- D6.3 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following facsimile number:
- The City of Winnipeg
Legal Services Department
Attn: Director of Legal Services
Facsimile No.: 204-947-9155
- D6.4 **Bids Submissions** must be submitted to the address in B8.8.

D7. FURNISHING OF DOCUMENTS

- D7.1 Upon award of the Contract, the Contractor will be provided with five (5) complete sets of the Bid Opportunity. If the Contractor requires additional sets of the Bid Opportunity, they will be supplied to him/her at cost.

SUBMISSIONS

D8. AUTHORITY TO CARRY ON BUSINESS

D8.1 The Contractor shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Contractor does not carry on business in Manitoba, in the jurisdiction where the Contractor does carry on business, throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.

D9. SAFE WORK PLAN

D9.1 The Contractor shall provide the Contract Administrator with a Safe Work Plan at least five (5) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.

D9.2 The Safe Work Plan shall be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/safety/default.stm>

D10. INSURANCE

D10.1 The Contractor shall provide and maintain the following insurance coverage:

- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured, with a cross-liability clause, such liability policy to also contain contractual liability, unlicensed motor vehicle liability, non-owned automobile liability, broad form property damage cover and products and completed operations, to remain in place at all times during the performance of the Work and throughout the warranty period;
- (b) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Work. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence;
- (c) an all risks Installation Floater carrying adequate limits to cover all machinery, equipment, supplies and/or materials intended to enter into and form part of any installation.

D10.2 Deductibles shall be borne by the Contractor.

D10.3 The Contractor shall provide the City Solicitor with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work but in no event later than the date specified in the C4.1 for the return of the executed Contract.

D10.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.

D11. PERFORMANCE SECURITY

D11.1 The Contractor shall provide and maintain performance security until the expiration of the warranty period in the form of:

- (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; or

- (b) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H2: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Contract Price; or
- (c) a certified cheque or draft payable to "The City of Winnipeg", drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Contract Price.

D11.1.1 Where the performance security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as performance security.

D11.2 If the bid security provided in his/her Bid was not a certified cheque or draft pursuant to B13.1(c), the Contractor shall provide the City Solicitor with the required performance security within seven (7) Calendar Days of notification of the award of the Contract by way of letter of intent and prior to the commencement of any Work on the Site and in no event later than the date specified in the C4.1 for the return of the executed Contract.

D12. SUBCONTRACTOR LIST

D12.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at or prior to a pre-construction meeting, or at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in the C4.1 for the return of the executed Contract.

D13. DETAILED WORK SCHEDULE

D13.1 The Contractor shall provide the Contract Administrator with a detailed work schedule (Form L: Detailed Work Schedule) at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in the General Conditions for the return of the executed Contract.

SCHEDULE OF WORK

D14. COMMENCEMENT

D14.1 The Contractor shall not commence any Work until he/she is in receipt of a letter of intent from the Award Authority authorizing the commencement of the Work.

D14.2 The Contractor shall not commence any Work on the Site until:

- (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D8;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) the twenty-four (24) hour emergency response phone number specified in D4.2.
 - (iv) the Safe Work Plan specified in D9;
 - (v) evidence of the insurance specified in D10;
 - (vi) the performance security specified in D11;
 - (vii) the subcontractor list specified in D12; and
 - (viii) the detailed work schedule specified in D13.
- (b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.

D14.3 The Contractor shall commence the Work on the Site within seven (7) Working Days of receipt of the letter of intent.

D15. WORKING DAYS

D15.1 Further to C1.1(jj);

D15.1.1 The Contract Administrator will determine daily if a Working Day has elapsed and will record his/her assessment. On a weekly basis the Contract Administrator will provide the Contractor with a record of the Working Days assessed for the preceding week. The Contractor shall sign each report signifying that he/she agrees with the Contract Administrator's determination of the Working Days assessed for the report period.

D15.1.2 Work done to restore the Site to a condition suitable for Work, shall not be considered "work" as defined in the definition of a Working Day.

D15.1.3 When the Work includes two or more major types of Work that can be performed under different atmospheric conditions, the Contract Administrator shall consider all major types of Work in determining whether the Contractor was able to work in assessing Working Days.

D16. RESTRICTED WORK HOURS

D16.1 Further to clause 3.10 of CW 1130, the Contractor shall require written permission forty-eight (48) hours in advance from the Contract Administrator for any work to be performed between 2000 hours and 0700 hours, or on Saturdays, Sundays, Statutory Holidays and or Civic Holidays.

D17. WORK BY OTHERS

D17.1 Work by others on or near the Site will include but not necessarily be limited to:

- (a) City of Winnipeg Geomatics Branch;
- (b) Manitoba Hydro-excavation around Fibre Optic cables and lowering gas line;
- (c) Manitoba Hydro –construction of new Fleet Services Centre north of Mollard Avenue;
- (d) Manitoba Telecom Services-MTS duct line crossings north and south of Mollard Avenue;

D18. SEQUENCE OF WORK

D18.1 Further to C6.1, the sequence of work shall be as follows:

- (i) Excavation existing gravel surface;
- (ii) Sub-grade compaction;
- (iii) Placement of separation geotextile fabric and geogrid where required;
- (iv) Supply and placement of sub-base and base course material;
- (v) Culverts removal and new culverts installation, including debris grates;
- (vi) Grading of east ditch;
- (vii) Placement topsoil and finish grading;
- (viii) Placement of seed;
- (ix) Restoration of approaches;

D18.1.2 The Contractor shall be permitted to close the entire road to traffic to facilitate construction, except that access needs to be maintained at all times to approaches for any private residences and the Manitoba Hydro sub-station site north of Mollard Avenue.

D18.1.3 Placement of Chip Seal Surface Treatment shall be placed after full completion both lanes. Immediately following the completion of the Chip Seal Work the Contractor shall clean up

the Site and remove all surplus material. The completion of a street means that all of the approaches and landscaping Work is completed to the satisfaction of the Contract Administrator.

D18.1.4 Placing the topsoil and finished grading of all ditches shall be completed prior to commencing construction of Chip Seal Asphalt Treatment, including the emulsion surface coating.

D18.2 Granular road renewal work for City of Winnipeg Bid Opp. 752-2014 commenced in May 2015, and is being performed on Pipeline Road from 150m north of Templeton Avenue to the south limit of this Contract (south of Mollard Road). Work on City Bid Opp 752-2014 may still be in progress when work on this Contract commences, and if so the Contractor shall plan for their work on this bid opportunity to commence immediately following completion of the work on Bid Opportunity 752-2014, in manner to the satisfaction of the Contract Administrator

D19. SUBSTANTIAL PERFORMANCE

D19.1 The Contractor shall achieve Substantial Performance within thirty-five (35) consecutive Working Days of the commencement of the Work as specified in D14.

D19.2 When the Contractor considers the Work to be substantially performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Substantial Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be re-inspected.

D19.3 The date on which the Work has been certified by the Contract Administrator as being substantially performed to the requirements of the Contract through the issue of a certificate of Substantial Performance is the date on which Substantial Performance has been achieved.

D20. TOTAL PERFORMANCE

D20.1 The Contractor shall achieve Total Performance within forty (40) consecutive Working Days of the commencement of the Work as specified in D14.

D20.2 When the Contractor or the Contract Administrator considers the Work to be totally performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Total Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be re-inspected.

D20.3 The date on which the Work has been certified by the Contract Administrator as being totally performed to the requirements of the Contract through the issue of a certificate of Total Performance is the date on which Total Performance has been achieved.

D21. LIQUIDATED DAMAGES

D21.1 If the Contractor fails to achieve Substantial Performance in accordance with the Contract by the day fixed herein for Substantial Performance, the Contractor shall pay the City two-thousand one hundred dollars (\$2,100) per Working Day for each and every Working Day following the day fixed herein for Substantial Performance during which such failure continues.

D21.2 The amount specified for liquidated damages in D21.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Substantial Performance by the day fixed herein for same.

D21.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

- D21.4 If the Contractor fails to achieve Total Performance in accordance with the Contract by the day fixed herein for Total Performance, the Contractor shall pay the City one-thousand one-hundred dollars (\$1,100) per Working Day for each and every Working Day following the day fixed herein for Total Performance during which such failure continues.
- D21.5 The amount specified for liquidated damages in D21.4 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Total Performance by the day fixed herein for same.
- D21.6 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed

D22. SCHEDULED MAINTENANCE

- D22.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
- (a) Chip Seal Treatment as specified in E14;
 - (b) Seeding as specified in CW 3520-R7;
- D22.2 Determination of Substantial Performance and Total Performance shall be exclusive of scheduled maintenance identified herein. All scheduled maintenance shall be completed prior to the expiration of the warranty period. Where the scheduled maintenance cannot be completed during the warranty period, the warranty period shall be extended for such period of time as it takes the Contractor to complete the scheduled maintenance.

CONTROL OF WORK

D23. JOB MEETINGS

- D23.1 Regular weekly job meetings will be held at Site. These meetings shall be attended by a minimum of one representative of the Contract Administrator, one representative of the City and one representative of the Contractor. Each representative shall be a responsible person capable of expressing the position of the Contract Administrator, the City and the Contractor respectively on any matter discussed at the meeting including the Work schedule and the need to make any revisions to the Work schedule. The progress of the Work will be reviewed at each of these meetings.
- D23.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

D24. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

- D24.1 Further to C6.24, the Contractor shall be the Prime Contractor and shall serve as, and have the duties of the Prime Contractor in accordance with The Workplace Safety and Health Act (Manitoba).

D25. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS

- D25.1 Further to B12.4, the Contractor/Subcontractor must, throughout the term of the Contract, have a Workplace Safety and Health Program meeting the requirements of The Workplace Safety and Health Act (Manitoba). At any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require updated proof of compliance, as set out in B12.4.

MEASUREMENT AND PAYMENT

D26. PAYMENT

- D26.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D27. WARRANTY

- D27.1 Notwithstanding C13.2, the warranty period shall begin on the date of Total Performance and shall expire two (2) years thereafter unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.
- D27.2 Notwithstanding C13.2 or D27.1, the Contract Administrator may permit the warranty period for a portion or portions of the Work to begin prior to the date of Total Performance if:
- (a) a portion of the Work cannot be completed because of unseasonable weather or other conditions reasonably beyond the control of the Contractor but that portion does not prevent the balance of the Work from being put to its intended use.
- D27.2.1 In such case the date specified by the Contract Administrator for the warranty period to begin shall be substituted for the date specified in C13.2 for the warranty period to begin.

FORM H1: PERFORMANCE BOND
(See D11)

KNOW ALL MEN BY THESE PRESENTS THAT

_____ ,
(hereinafter called the "Principal"), and

_____ ,
(hereinafter called the "Surety"), are held and firmly bound unto **THE CITY OF WINNIPEG** (hereinafter called the "Obligee"), in the sum of

_____ dollars (\$ _____)

of lawful money of Canada to be paid to the Obligee, or its successors or assigns, for the payment of which sum the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Principal has entered into a written contract with the Obligee for

BID OPPORTUNITY NO. 536-2015

2015 GRANULAR ROADWAY RENEWAL PROGRAM - PIPELINE ROAD FROM MOLLARD AVENUE TO PERIMETER HIGHWAY

which is by reference made part hereof and is hereinafter referred to as the "Contract".

NOW THEREFORE the condition of the above obligation is such that if the Principal shall:

- (a) carry out and perform the Contract and every part thereof in the manner and within the times set forth in the Contract and in accordance with the terms and conditions specified in the Contract;
- (b) perform the Work in a good, proper, workmanlike manner;
- (c) make all the payments whether to the Obligee or to others as therein provided;
- (d) in every other respect comply with the conditions and perform the covenants contained in the Contract; and
- (e) indemnify and save harmless the Obligee against and from all loss, costs, damages, claims, and demands of every description as set forth in the Contract, and from all penalties, assessments, claims, actions for loss, damages or compensation whether arising under "The Workers Compensation Act", or any other Act or otherwise arising out of or in any way connected with the performance or non-performance of the Contract or any part thereof during the term of the Contract and the warranty period provided for therein;

THEN THIS OBLIGATION SHALL BE VOID, but otherwise shall remain in full force and effect. The Surety shall not, however, be liable for a greater sum than the sum specified above.

AND IT IS HEREBY DECLARED AND AGREED that the Surety shall be liable as Principal, and that nothing of any kind or matter whatsoever that will not discharge the Principal shall operate as a discharge or release of liability of the Surety, any law or usage relating to the liability of Sureties to the contrary notwithstanding.

IN WITNESS WHEREOF the Principal and Surety have signed and sealed this bond the

_____ day of _____, 20____ .

SIGNED AND SEALED
in the presence of:

(Witness as to Principal if no seal)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

By: _____ (Seal)
(Attorney-in-Fact)

**FORM H2: IRREVOCABLE STANDBY LETTER OF CREDIT
(PERFORMANCE SECURITY)**
(See D11)

(Date)

The City of Winnipeg
Legal Services Department
185 King Street, 3rd Floor
Winnipeg MB R3B 1J1

RE: PERFORMANCE SECURITY – BID OPPORTUNITY NO. 536-2015

2015 GRANULAR ROADWAY RENEWAL PROGRAM - PIPELINE ROAD FROM MOLLARD
AVENUE TO PERIMETER HIGHWAY

Pursuant to the request of and for the account of our customer,

(Name of Contractor)

(Address of Contractor)

WE HEREBY ESTABLISH in your favour our irrevocable Standby Letter of Credit for a sum not exceeding
in the aggregate

_____ Canadian dollars.

This Standby Letter of Credit may be drawn on by you at any time and from time to time upon written demand for payment made upon us by you. It is understood that we are obligated under this Standby Letter of Credit for the payment of monies only and we hereby agree that we shall honour your demand for payment without inquiring whether you have a right as between yourself and our customer to make such demand and without recognizing any claim of our customer or objection by the customer to payment by us.

The amount of this Standby Letter of Credit may be reduced from time to time only by amounts drawn upon it by you or by formal notice in writing given to us by you if you desire such reduction or are willing that it be made.

Partial drawings are permitted.

We engage with you that all demands for payment made within the terms and currency of this Standby Letter of Credit will be duly honoured if presented to us at:

(Address)

and we confirm and hereby undertake to ensure that all demands for payment will be duly honoured by us.

All demands for payment shall specifically state that they are drawn under this Standby Letter of Credit.

Subject to the condition hereinafter set forth, this Standby Letter of Credit will expire on

(Date)

It is a condition of this Standby Letter of Credit that it shall be deemed to be automatically extended from year to year without amendment from the present or any future expiry date, unless at least 30 days prior to the present or any future expiry date, we notify you in writing that we elect not to consider this Standby Letter of Credit to be renewable for any additional period.

This Standby Letter of Credit may not be revoked or amended without your prior written approval.

This credit is subject to the Uniform Customs and Practice for Documentary Credit (2007 Revision), International Chamber of Commerce Publication Number 600.

(Name of bank or financial institution)

Per: _____
(Authorized Signing Officer)

Per: _____
(Authorized Signing Officer)

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

- E1.1 These Specifications shall apply to the Work.
- E1.2 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.2.1 *The City of Winnipeg Standard Construction Specifications* is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/Spec/Default.stm>
- E1.2.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.2.3 Further to C2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.3 The following are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing Name/Title</u>	<u>Drawing (Original) Sheet Size</u>
000	Cover Sheet	
012	100+/-m South of Mollard Avenue to Garden View Drive STA 11+00 to STA 11+80	A1
013	100+/-m South of Mollard Avenue to Garden View Drive STA 11+80 to STA 12+90	A1
014	100+/-m South of Mollard Avenue to Garden View Drive STA 12+90 to STA 14+00	A1
015	100+/-m South of Mollard Avenue to Garden View Drive STA 14+00 to STA 15+10	A1
016	100+/-m South of Mollard Avenue to Garden View Drive STA 15+10 to STA 16+20	A1
017	100+/-m South of Mollard Avenue to Garden View Drive STA 16+20 to STA 17+30	A1
018	100+/-m South of Mollard Avenue to Garden View Drive STA 17+30 to STA 18+40	A1
019	100+/-m South of Mollard Avenue to Garden View Drive STA 18+40 to STA 19+50	A1
020	100+/-m South of Mollard Avenue to Garden View Drive STA 19+50 to STA 20+60	A1
021	100+/-m South of Mollard Avenue to Garden View Drive STA 20+60 to STA 21+70	A1
022	100+/-m South of Mollard Avenue to Garden View Drive STA 21+70 to STA 22+80	A1
023	100+/-m South of Mollard Avenue to Garden View Drive STA 20+80 to STA 23+90	A1
024	100+/-m South of Mollard Avenue to Garden View Drive STA 23+90 to STA 25+00	A1
025	100+/-m South of Mollard Avenue to Garden View Drive STA 25+00 to STA 26+10	A1
026	100+/-m South of Mollard Avenue to Garden View Drive STA 26+10 to STA 27+00	A1
027	100+/-m South of Mollard Avenue to Garden View Drive STA 27+00 to Garden View Drive	A1
028	Miscellaneous Details	A1

E2. GEOTECHNICAL REPORT

- E2.1 Further to C3.1, the geotechnical report is provided to aid the Contractor's evaluation of the pavement structure and/or existing soil conditions. The geotechnical report is contained in Appendix 'A'.

E3. PROTECTION OF EXISTING TREES

- E3.1 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing boulevard trees within the limits of the construction area:
- (a) The Contractor shall not stockpile materials and soil or park vehicles and equipment on boulevards within 2 metres of trees.
 - (b) Trees identified to be at risk by the Contract Administrator are to be strapped with 25 x 100 x 2400mm wood planks, or suitably protected as approved by the Contract Administrator.
 - (c) Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches), with the outcome read in feet, from the closest edge of the trunk. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation.
 - (d) Operation of equipment within the dripline of the trees shall be kept to the minimum required to perform the work required. Equipment shall not be parked, repaired, refuelled; construction materials shall not be stored, and earth materials shall not be stockpiled within the driplines of trees. The dripline of a tree shall be considered to be the ground surface directly beneath the tips of its outermost branches. The Contractor shall ensure that the operations do not cause flooding or sediment deposition on areas where trees are located.
 - (e) Work on-site shall be carried out in such a manner so as to minimize damage to existing tree branches. Where damage to branches does occur, they shall be neatly pruned.
- E3.2 All damage to existing trees caused by the Contractor's activities shall be repaired to the requirements and satisfaction of the Contract Administrator and the City Forester or his/her designate.
- E3.3 No separate measurement or payment will be made for the protection of trees.
- E3.4 Except as required in clause E3.1(c) and E3.1(e), Elm trees shall not be pruned at any time between April 1 and July 31.

E4. TRAFFIC CONTROL

- E4.1 Further to clauses 3.6 and 3.7 of CW 1130:
- (a) Where directed, the Contractor shall construct and maintain temporary asphalt ramps to alleviate vertical pavement obstructions such as manholes and planing drop-offs to the satisfaction of the Contract Administrator. Payment shall be in accordance with CW3410.
 - (b) In accordance with the Manual of Temporary Traffic Control in Work Areas on City Streets, the Contractor ("Agency" in the manual) shall make arrangements with the Traffic Services Branch of the City of Winnipeg to place all temporary regulatory signs. The Contractor shall bear all costs associated with the placement of temporary traffic control devices by the Traffic Services Branch of the City of Winnipeg in connection with the works undertaken by the Contractor.

E5. TRAFFIC MANAGEMENT

E5.1 Further to clause 3.7 of CW 1130:

E5.1.1 Intersecting street and private approach access shall be maintained at all times.

E5.1.2 Should the Contractor be unable to maintain pedestrian or vehicular access to a residence or business, he/she shall review the planned disruption with the business or residence and the Contract Administrator, and take reasonable measures to minimize the impact. The Contractor shall provide a minimum of 24 hours notification to the affected residence or business and the Contract Administrator, prior to disruption of access.

E5.1.3 Pedestrian and ambulance/emergency vehicle access must be maintained at all times.

E5.1.4 Further to E5.1.1 and E5.1.2, the Contractor shall be responsible for providing suitable access to private residence and provincial authorities. Installation of temporary approaches prior to replacement of culverts in existing approaches shall be performed where maintaining use of the existing approach during culvert replacement is not possible.

E5.1.5 Temporary approaches for private and provincial properties shall be installed in accordance with E11.

E5.1.6 Prior to commencing construction the Contractor shall submit their Site access plan to the Contract Administrator for approval.

E5.1.7 On Pipeline Road, no closures beyond what is permitted in the traffic management plan without written permission of the Contract Administrator. The Contractor shall install temporary signs "Road Closed" and "Speed Limit Control". Where a hazard to vehicular traffic is created by work on a construction site the Contractor shall provide a trained Flag Person that to accommodate traffic across the hazard in accordance with the Manual of Temporary Traffic Control.

E6. REFUSE AND RECYCLING COLLECTION

E6.1 While access to refuse and/or recycling collection vehicles is restricted, on collection day(s) the Contractor shall move all of the affected property owners refuse and/or recycling materials to a nearby common area, prior to an established time, in accordance with E6.2 to permit the normal collection vehicles to collect the materials. Immediately following recycling collection the Contractor shall return recycling receptacles to the addresses marked on the receptacles.

E6.2 Collection Schedule:

Pipeline Road from Mollard Avenue to Perimeter Highway.

<i>Collection Day(s):</i>	Wednesday
<i>Collection Time:</i>	7:00 am to 6:00 pm
<i>Common Collection Area:</i>	Front Street

E6.3 No measurement or payment will be made for the work associated with this specification.

E7. WATER OBTAINED FROM THE CITY

E7.1 Further to clause 3.7 of CW 1120, the Contractor shall pay for all costs, including sewer charges, associated with obtaining water from the City in accordance with the Waterworks and Sewer By-laws.

E8. SURFACE RESTORATIONS

- E8.1 Further to clause 3.3 of CW 1130, when Total Performance is not achieved in the year the Contract is commenced, the Contractor shall temporarily repair any Work commenced and not completed to the satisfaction of the Contract Administrator. The Contractor shall maintain the temporary repairs in a safe condition as determined by the Contract Administrator until permanent repairs are completed. The Contractor shall bear all costs associated with temporary repairs and their maintenance.

E9. INFRASTRUCTURE SIGNS

- E9.1 The Contractor shall obtain infrastructure signs from the Traffic Services Sign Shop at 421 Osborne Street. The Contractor shall mount each sign securely to a rigid backing material approved by the Contract Administrator. The Contractor shall fasten each sign to a suitable support and erect and maintain one sign at each street as directed by the Contract Administrator. When the Contract Administrator considers the Work on the street complete, the Contractor shall remove and dispose of the signs and supports. No measurement for payment will be made for performing all operations herein described and all other items incidental to the work described

E10. TEMPORARY APPROACHES

- E10.1 Where the Contractor is unable to maintain access to a private residence via the existing private approach to the residence or during removal and replacement of culverts underneath the approach, the Contractor shall construct a temporary approach to the residence adjacent to the existing one to provide the homeowner uninterrupted vehicular access to their property during construction.

MATERIALS

- E10.2 The Contractor shall supply, place and compact granular material to provide a temporary approach to a private residence adjacent to the existing approach being worked on. The contractor may use suitable excavated granular material from Pipeline Road excavation as temporary fill material for the temporary approaches, provided that it can be compacted sufficiently to permit vehicles to traverse the temporary approach without causing rutting or getting stuck.
- E10.3 The Contractor shall supply and place a temporary drain pipe underneath the temporary approach to maintain an outlet for ditch drainage until the temporary approach is removed. The temporary drain pipe shall be no smaller than 450mm diameter. The Contractor is permitted to re-use existing culverts removed from site as temporary drain pipes underneath temporary approaches, provided that they are of sound condition and free of debris.
- E10.4 Upon completion of the culvert removal and replacement underneath the respective existing approach and restoration of the surface grade of the existing approach, the Contractor shall remove the temporary approach and drain pipe.
- E10.5 Granular material and drain piping used for temporary approaches shall be removed from site and shall not be re-used in construction of Pipeline Road.

MEASUREMENT AND PAYMENT

- E10.6 Construction of temporary approaches shall be at the Contract Unit Price for "Temporary Approaches" for each temporary approach constructed and measured by the Contract Administrator. The unit price shall include all labour, equipment and materials necessary to construct the temporary approach and remove it in accordance with this specification.
- E10.7 Supply and placement of suitable granular material for temporary approaches shall be incidental to the cost of constructing the temporary approach.

- E10.8 Supply and placement of the temporary drain pipe shall be incidental to the cost of constructing the temporary approach.
- E10.9 Removal and disposal of granular material off-site shall be incidental to the cost of construction the temporary approach.

E11. FIELD APPROACHES

E11.1 Description

- E11.1.1 The work shall consist of reconstruction existing field approach with the lines, grades and dimension shown on the drawing.

E11.2 Materials

- E11.2.1 Earth material shall be obtain from site excavation and approved by Contact Administrator. Approved clay fill material shall be free from organic and consist of low to medium plastic clays or of mixtures of sand and clay, uniform in texture and suitable for compaction.

E11.3 Construction

- E11.3.1 All topsoil must be removed from excavated area prior culvert installation.
- E11.3.2 Establish grades and line in accordance with the Drawings. Place and compact material around and below proposed corrugated pipe in accordance with the CW 3610. Cap the side slopes around the culvert ends with compacted clay.
- E11.3.3 The culvert under field approach areas must be at least 12m in length and minimum culvert size is 450mm or as specified in the Drawings. Minimum ground cover over the culvert is 300mm of compacted clay.
- E11.3.4 Approach surface must be crowned 2% in both directions from the centre of the approach to accommodate for drainage, with a minimum of 300mm of compacted clay cover at the shoulders and finish surface grade at a minimum 50mm of ¾" crushed gravel up to property line. The maximum gradient of the approach shall be minimum 2% and maximum 5% grade from the shoulder of the road to the property line. The side slopes of the approach shall be a 3:1 ratio. The minimum wide of the road is 6m with a 3m intersecting radius at the 12m road allowance with taper 30m in accordance with Geometric Design Guide for Canadian Roads 1999 Edition Part 2.
- E11.3.5 Road approaches shall be 90 degrees to the major roadway. The sight distance for the road approaches shall be visible and satisfy requirement approaching vehicles to reduce speed to prevent a collision. The minimum sight distance is 75m in accordance to Table 2.3.3.3 (Geometric Design Guide for Canadian Roads 1999 Part-2).
- E11.3.6 All debris topsoil must be removed from the road allowance and hauled away in manner satisfactory to the Contract Administration.
- E11.3.7 All disturbed areas adjacent to approach must be maintain to original grade, seeded in a manner to allow for natural grasses to re-grow.

Measurement and Payment

Construction of field approaches shall be Contract Unit Price for "Field Approaches" for each approach constructed and measured by Contract Administration .The unit price shall include all labour, equipment, and material necessary to construct the approach.

Payment for Chip Seal Surface Treatment and Corrugated Steel Pipe Culvert installation will be paid in accordance with the Bid Opportunity Form B: Prices Specification.

E12. SUPPLY AND INSTALLATION OF DEBRIS GRATE

- E12.1 The Contractor shall supply and install debris grating on each end of all culverts installed in this contract.
- E12.2 The diameter of the culvert debris grates shall match the diameter of the culvert to which they are to be affixed; 600mm and 750mm diameter respectively.
- E12.3 Shop drawings shall be submitted for the debris gratings and shall be installed as shown on the drawings. Galvanizing shall be hot-dip conforming to requirements of CSA G164- N1981 to a minimum net retention of 600g/m². All bolts and nuts shall be typical steel, conforming to ASTM A-320 Grade B8M. All welding shall be fully approved by the Canadian Welding Bureau in conformance with CSA Standard W47.1. Welding shall be done by currently licensed welders only. Welding splatter and other fabricator burrs, where exposed, shall be ground off and/or filed smooth, and left ready for subsequent operations. All miscellaneous metal, after fabrication, shall be hot-dip galvanized. No separate measurement will be made for hot-dip galvanizing.

MEASUREMENT AND PAYMENT

- E12.4 Supply and installation of 600mm and 750mm diameter debris grates for the culverts crossing underneath will be paid for at the Contract Unit Price per unit for “600mm Debris Grate” and “750mm Debris Grate” for each debris grate supplied and installed in accordance with this specification.. The unit price shall be payment in full for supplying all materials and for completing all operations herein described and all other items incidental to the work included in this Specification.

E13. CHIP SEAL SURFACE TREATMENT

- E13.1 This Specification covers the supply and placement of one layer of chip seal surface treatment.

MATERIALS

- E13.2 Chip Seal surface treatment material shall be processed through a wash plant to remove fines and dust. The cost of the washing operation shall be included in the cost of the material. The asphalt surface treatment material will conform to the following grading requirements:

CANADIAN METRIC SIEVE SIZE	PERCENT OF TOTAL DRY WEIGHT PASSING EACH SIEVE 100MM MAX. AGGREGATE
10 000	100%
5 000	30 – 85%
2 500	0 – 20
1 250	0 – 10
80	0 - <1

- E13.2.1 **Note:** Traffic gravel and Seal Coat (Aggregate) material when subjected to the abrasion test will have a loss of not more than 35% when tested in accordance with grading B of ASTM (American Society for Testing and Materials) C131, Test for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine. As well, the aggregate retained on the No. 5 000 sieve will contain not less than 35% crushed aggregate as determined by actual particle count. Crushed aggregate will be considered as that aggregate having at least one fractured face.
- E13.2.2 The Contractor or sub contractor shall demonstrate the ability to manufacture Seal Coat (Aggregate) chips and shall have produced material of similar gradation within the last three (3) years. Upon a request from the Contract Administrator, the Bidder shall have three (3) Business days to provide proof of ability and experience as per B10.4.
- E13.3 Emulsified asphalt shall be HF 150S emulsion.

EQUIPMENT

E13.4 The Contractor shall ensure as a minimum, the following equipment is on-site:

- (a) Asphalt surface treatment oil distributor
- (b) Asphalt surface treatment aggregate material spreader
- (c) Steel drum roller – vibratory
- (d) Rubber tired wobbly roller – self-propelled
- (e) Loader
- (f) Sweeper

CONSTRUCTION METHODS

E13.5 Surface Preparation

E13.5.1 Ensure base course material is properly shaped and bladed to the satisfaction of the Contract Administrator. Final surface shall be crowned to provide proper drainage, shall be free of potholes and washboard and tight. The base course shall be well mixed with little segregation of coarse material.

E13.5.2 In preparation for the second layer of Chip Seal Surface Treatment, the roadway surface shall be swept clean of any mud, debris and loose stones, as directed by the Contract Administrator. This shall be incidental to the Work.

E13.6 Survey Requirements

E13.6.1 The Contract Administrator shall provide survey stakes with grades for excavation and the placement of the sub-base and base material. It shall be the responsibility of the Contractor to maintain and protect this survey information for the duration of the project. Any survey infrastructure removed, damaged, or destroyed by the Contractor or their equipment, without the consent of the Contract Administrator, shall be replaced by the Contract Administrator at the cost of the Contractor.

E13.7 Chip Seal Surface Treatment

E13.7.1 Emulsion shall be applied at a temperature as specified in the manufacturer's requirements and at a rate of 1.35 litres per m². Emulsion shall not be sprayed wider than the width of which the aggregate will be placed in a single pass. Spraying of the emulsion shall not precede the distribution of asphalt surface treatment material by more than 750 m, and shall be applied on a clean dry surface on a day when the atmospheric temperature is not less than 5 °C.

E13.7.2 Spread asphalt surface treatment material with a chip spreader at a uniform thickness immediately on the freshly placed oil. Aggregate shall be applied evenly to cover the emulsion to the approval of the Contract Administrator.

E13.7.3 The Contractor shall roll the entire surface with a steel drum roller to embed the chips.

E13.7.4 Finish rolling shall take place with rubber tired wobbly rollers to the satisfaction of the Contract Administrator.

E13.7.5 Once the oil has cured, remove excess loose chips with sweeper as directed by the Contract Administrator.

E13.7.6 The estimated quantities for Chip Seal Surface Treatment make provision for a two layers of Chip Seal Surface Treatment to be placed on Pipeline Road. The limits for the top layer of Chip Seal Surface Treatment shall extend the entire length of Pipeline Road from the end of concrete north of Templeton Avenue to Garden View Drive, as directed by the Contract Administrator.

MEASUREMENT AND PAYMENT

E13.8 The supplying, placing, rolling, and finishing of the chip seal surface treatment will be measured on an area basis per layer of chip seal placed and paid for at the Contract Unit Price per square metre for "Chip Seal Surface Treatment". The area to be paid for will be the total number of square metres of chip seal surface treatment placed in accordance with this Specification, accepted and measured by the Contract Administrator. Each layer of Chip Seal Surface Treatment will be measured separately.

E14. FLAP GATE

E14.1 Description

E14.1.1 The work shall cover the supply and installation, delivery and testing of Cast Iron Flap Gate Series 20C on steel pipe flange.

E14.2 General Design:

E14.2.1 Type: Double hinge action and adjustable top pivot points. All four pivot points are bronze bushed.

E14.2.2 Seating Head: Maximum design seating head for flap gate (6m or 20 feet) will be from centreline of the gate to the water surface.

E14.2.3 Gate Frame: Cast Iron Gate frame shall have a flat back suitable for attachment to a round pipe flange.

E14.2.4 Seating Face: One piece cast iron raised surface and inclined to assure positive closure. The clearance between cover and frame shall not exceed 0.1mm.

E14.2.5 Link Arms: Complete with grease nipples at pivot points and adjusting screws to align seating surface.

E14.2.6 Pivot Lugs: Adjustable in horizontal plane without removal of cover, complete with grease nipples.

E14.3 Materials:

E14.3.1 Frame/Cover: Cast Iron ASTM A48, Class-30

E14.3.2 Links Arms: Cast Iron A48, Class-30; Painted Steel(option), Class-30

E14.3.3 Seating Face: Cast Iron ASTM A 48, Class-30

E14.3.4 Bushings: Bronze, 660 Cast

E14.3.5 Assembly Fasteners: 304SS-ASTM F593(Bolts), ASTM F594(Nuts). All SS fasteners should be installed with anti-seize lubricant such as FELPRO C5A copper base anti-seize lubricant

E14.3.6 Paint (Frame, Cover, and Link Arms): Surface preparation-SSPC SP-10, two coats International Paint "Intergard FP" 125-150 µm per coat total dry film thickness

E14.3.7 Mounting Gasket: Butyl Joint Sealer (12 mm square) or Hamilton Kent Seal

E14.4 Shop Drawings

E14.4.1 Submit shop drawings of Cast Iron Flap Gate Series 20C c/w rounding pipe flange to the Contract Administrator. The manufacturer shop drawings shall indicate the gate assembly opening size, type of material, schedule of parts and principal dimensions. Gate assembly installation procedures shall also be provided to supplement the shop drawings.

E14.4.2 The Contract Administrator will examine the Flap Gate assemblies and accessories upon delivery and will reject any equipment that it found to be damaged to the extent that, in the Contract Administrator opinion, it cannot be put to the use for which it was intended. The

Contractor shall arrange with the gate supplier to repair any superficially damaged equipment to the satisfaction of the Contract Administrator.

E14.4.3 It shall be responsibility of the Contractor to negotiate any claims for damage with the carrier and to make arrangement to have any reject equipment replaced as soon as possible at no extra expense to the City.

E14.5 Construction Methods

E14.5.1 Installation

E14.5.2 Handling and installation of all components shall be in accordance with the manufacturer's shop drawings and installation instruction.

E14.5.3 Make arrangement to have a qualified field representative of the flap gate supplier/manufacturer inspect the installation during and after completion and provide a Certificate of Satisfactory Installation to the Contract Administrator.

E14.6 Shop Testing

E14.6.1 Prior to shipment the gate assembly shall be shop inspected and adjusted for proper operation. Provide copy of the test report for Loss Head Performance through flap gate in accordance with Head Loss through Calco Gates of varying sizes and with different velocities of flow, included on the report shall be signature of the official who is responsible for the gate assembly and testing.

E14.7 Commissioning

E14.7.1 After installation of the gate, the seating surfaces shall be cleaned thoroughly of all foreign materials, the stem lubricated (if required) and final adjustments made. The gate shall be then be cycled from the fully closed open position to ensure smooth operation of the gate.

E14.8 Measurement and Payment

E14.8.1 Supply , installation and testing of Cast Iron Flap Gate and round pipe flange will be paid for the Contract Unit Price for` ` Flap Gate 'The unit price shall be payment in full for completing all operations herein described and all other items incidental to the work included in this Specification.

E15. GROUTED RIPRAP

E15.1 Description

E15.1.1 This Specification shall amend and supplement Standard Specification CW 3615.

E15.2 Materials

E15.2.1 Riprap

- (a) Rock for riprap shall consist of hard, dense, durable rock. The rock shall be angular crushed limestone, resistant to the action of air and water and suitable in all other respects for the purpose intended.
- (b) The stones shall range in size from 100mm to 300mm in diameter with 75% by count between 200mm and 300mm and 25% by count between 100mm and 200mm.
- (c) Crushed limestone when subjected to the Los Angeles abrasion test shall have a loss of not more than thirty-two percent (32%).
- (d) Crushed limestone when subjected to the Magnesium Sulphate Soundness test shall have a loss of not more than eighteen percent (13%).
- (e) The sample material shall be crushed to 37.5 mm maximum aggregate size and tested in accordance with ASTM C131 – Resistance to Degradation of Small size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine and ASTM C88 – Soundness of Aggregates by Use of Magnesium Sulphate.

- (f) The rock for riprap shall be approved by the Contract Administrator prior to riprap installation.

E15.2.2 Geotextile

- (a) Geotextile shall be as per CW 3130

E15.2.3 Grout

- (a) Grout shall be as per CW 3615.

E15.3 Construction Methods

E15.3.1 Riprap

- (a) Installation of 300mm grouted riprap shall be as per Clause 9.3 of CW 3615. Total depth of concrete and riprap to be as shown on the drawings.
- (b) Riprap shall not be dropped onto the geotextile from a height greater than 300mm.
- (c) Any geotextile damaged during placement of the riprap shall be replaced as directed by the Contract Administrator at the Contractors expense.

E15.4 Method of Measurement and Payment

E15.4.1 Supply , installation Grouted Riprap will be paid for the Contract Unit Price for ``Grouted Riprap `The unit price shall be payment in full for completing all operations herein described and all other items incidental to the work included in this Specification.

- (a) Grouted Riprap As per Clauses 13.2 of CW 3615.
- (b) Non-woven material As per Clause 4.1 of CW 3130
- (c) Rockfill Riprap As per Clause 12.2 of CW 3615